

EVALUATION OF SCHOOL BASED TEACHERS TRAINING INTERVENTION FOR COMMON CHILD MENTAL HEALTH PROBLEMS IN PAKISTAN

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ABSTRACT

Objective: The main aim of this present study is to provide teachers with skills needed to recognize and manage children with mental health problems through school-based training.

Design: Pre and post training analysis.

Place and Duration of study: This study was conducted in various schools of Karachi, Pakistan from July 2010 to July 2011.

Subjects and Methods: This study will involve the development and evaluation of a two-day workshop (10-12 hours) for 89 teachers of primary school children to provide them with an understanding of mental health, and train them in skills needed to meet the needs of children.

Results: Post training analysis suggested an improvement in the teachers' knowledge, about common child behavioral and emotional difficulties.

Conclusion: In low-income developing country like Pakistan teachers should be trained in early intervention programmes for identification and school based management of emotional and behavioral problems.

Key words: Teachers training intervention, Child mental health problems, Training.

INTRODUCTION

Epidemiological research in Pakistan indicates a high prevalence of psychiatric disorders among children and adolescents. Approximately 17% of main-stream primary school children aged 5 to 11 in Karachi, have a diagnosable psychiatric disorder¹ and additional youngsters experience social and emotional difficulties that do not meet symptom criteria for a disorder but cause considerable distress and impairment in functioning¹. Unfortunately, there is a significant gap between the many children who are in need of treatment and those who actually receive mental health care. The failure in early identification and appropriate treatment to child represents a major public health concern².

Schools present a crucial avenue for ameliorating this problem, because teachers have extended contact with children on a daily basis, they are often in a position to recognize early patterns of behavior that pose a risk for a child's academic, social, emotional or behavioral functioning³. This has important implication for school based teachers trainings, particularly as previous stud-

ies have demonstrated that educational interventions can improve the accuracy of both teacher and GP identification of children with mental health problems^{4,5}. Similar findings have been established for teacher recognition of ADHD and classroom-based management techniques^{6,7}. In a school-based study in Pakistan, qualified teachers who attended a brief course on child mental health were more able to identify children with behavioural difficulties, and to manage such difficulties in the classroom environment⁸. These findings are particularly relevant to low-income countries, with limited mental health resources, and where schools and teachers can adopt a more prominent preventive role^{9,10}. Several other studies have reported that with adequate knowledge and support teachers are able to provide 'front-line' detection and referral to mental health services¹¹. The effectiveness of these trainings indicates that it is possible to conduct school-based interventions using available resources.

A thorough review of published Pakistani research literature showed that no studies of teachers' training programs in child mental health disorder have been done. We did not find any information whether any such programs for school teachers exist in the entire country. Thus, the aims of the present study were to develop and evaluate a school-based teachers' training program for early identification of common child mental health disorders and assess if teachers' knowledge regarding the

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disorder showed any significant improvement after such a programme. Based on research evidence indicating the benefits of using a combined approach, this study is uses a quantitative approach to measure change in knowledge as well as an open ended feedback with teachers to further evaluate the study outcomes.

SUBJECTS AND METHODS

Part 1: Developing the training materials

Developing the training

The aim was to develop a training intervention for academic staff, to improve teacher's knowledge of common childhood related mental health problems.

The training workshops

A twelve hour training programme on child mental health problems was conducted with primary school teachers (Grade 1-5). The programme consisted of six sessions each about two hours long. The sessions were delivered by a Child and Adolescent Psychologist and Researcher and experienced educationist using an inter active approach and a combination of video clips, hand-outs, and presented material, the sessions covered several areas, including a description of child mental health problems; how these present at school; their role as risk factors and an outline of possible outcomes; and class-

room management strategies. The teachers were also provided with written material covering all these topics.

Outcome Measures

- a) Teacher's knowledge and recognition of child mental health problems was measured by rating scales. The questionnaire consisted of two sections. The first section covered demographic details (age, gender, teaching experience, qualifications, and previous trainings). The second section consisted of items related to presentation and symptoms of child mental health problems. This measure was repeated post-training to evaluate changes in recognition of common mental health problems. Other studies have used a similar measure⁶.
- b) Feedback questionnaire was provided to all participants providing information about the usefulness and implications of training for teachers.

Part 2: Procedural and methodological information

Target population and sample

This study was carried out in three schools in various areas of Karachi. The school authorities were informed about the present study, and written consent were obtained from the school principals and participants. The authorities were further asked to identify 30 teachers (preferably class teacher) from Grades 1

Table 1

Outline for training intervention with teachers

| | | |
|---|--|---|
| <p>Session 1 Introduction</p> <ul style="list-style-type: none"> • Discussion on mental health and social taboos • Group discussions on common childhood problems | <p>Session 2 Child growth and development</p> <ul style="list-style-type: none"> • Stages of healthy child development <ul style="list-style-type: none"> * Physical * Social * Emotional * Intellectual * Moral | <p>Session 3 Factors effecting child mental health</p> <ul style="list-style-type: none"> • Risk and resilience factors for common mental health problems • Cause of mental health difficulties in children <ul style="list-style-type: none"> * Role of school, family, media & society |
| <p>Session 4 Rates and types of child mental health disorders</p> <ul style="list-style-type: none"> • When does a problem become a disorders • Child mental health disorders in Pakistan <ul style="list-style-type: none"> * Anxiety (emotional disorders) * Mood disorders * Behaviour disorders | <p>Session 5 Behaviour management I</p> <ul style="list-style-type: none"> • Home management of common behavioural problems <ul style="list-style-type: none"> * Setting rules and consequences * Praise and rewards * Handling inappropriate behaviour | <p>Session 6 Managing inappropriate behaviour</p> <ul style="list-style-type: none"> • Specific behaviour management strategies for disruptive child <ul style="list-style-type: none"> * Catch me being good * Star charts * Behaviour contracts * Token economy * Time-out |

to 5. This range was selected as it represents the age for compulsory schooling in Pakistan according to 'Compulsory Primary Education Ordinance (2002)¹²', therefore, it ensured a representative and homogenous sample of school children.

Data collection

Data was conducted using especially designed questionnaire. A total of 101 teachers completed the questionnaire pre-training and 91 completed it post-training. Both pre and post-training data is available for 89 teachers.

Data analysis

Staff knowledge and recognition was measured by rating scales, as categorical and continuous scores. The groups were compared by t-test. Qualitative data were analysed using thematic methods¹³. Thematic analysis is a flexible, descriptive method that allows the emergence of a narrative to formulate the important features relevant to the research question¹⁴. The analysis, as such, forms a framework for recommendations and suggestions and provides a platform for building future research in relation to the topic.

RESULTS

Demographic profile

A total of eight-nine teachers took part in the training programme. All of the participants were females. Most of them were around the age of 21-25 years (35%), only 5% of the samples were above the age of 40 years. 36.1% of the participants had a Bachelor's degree and only 6.7% had higher professional degree. A large number, 38.5% had an average of 5-10 years teaching experience, 23.1% had 1-2 years of experience where as 21.5% had less than one year teaching experience. A majority of the participants 53.6% had previous training experience mainly related to teaching and subject based learning, none of the participants had previously attended any trainings related to child psychology or behaviour management.

Pre and Post training analysis (total sample, n=89)

T-test result indicated a significant difference between pre and post training for the total sample on the 20 item questionnaire (p=0.000, df=88). The mean score

for correct responses was higher in the post training compared pre-training indicating an improvement in teacher's knowledge of common child mental health disorders at the completion of the training programme.

Qualitative results (Teacher feedback questionnaires)

Change in teacher's knowledge about child mental health following the training programme analyzed through open ended feedback forms revealed several key features regarding the relevance assigned to usefulness of the training intervention. In relation to training programme, four themes emerged: positive features and shortcomings; appraisal of the handbook; perceived impact of training; suggested improvements.

Theme 1: Positive comments and proposed shortcomings

While respondents found the training 'very interesting', and 'useful', the most prominent positive feature was increase in knowledge about the presentation of different behavioral and emotional problems amongst children. On the whole academic professionals were highly appreciative and receptive to being trained in child mental health matters.

"I am a trained teacher, but even during our training we have never previously discussed about Child Psychology and in particular about the common problems children face, as a teacher I have come across several pupils with behavioural and emotional difficulties and have tried my best to help them, but this training has taught me some very useful skills and techniques on how best to identify and manage children with difficulties." (Grade 3, teacher)

Theme 2: Appraisal of the Handbook and training resources

Analysis revealed predominantly positive perceptions of the Child's Emotional Well-being Handbook, with some respondents describing it as being 'brilliant', 'excellent' and 'really good'. Participants reported that they found its content informative and a useful reference, particularly for less experienced staff.

"I really like the handbook; I mean it adds to what we learnt during the training. It is clearly laid out with a lot of particle classroom based examples as

Table 2

T-test for difference between pre-post training interventions for the total sample (n=89)

| Intervention | t-test | P value | Mean | SD | SE | df | 95% CI |
|--------------|--------|---------|-------|------|------|----|-------------|
| Pre-test | 39.81 | 0.000 | 10.58 | 2.51 | 0.27 | 88 | 10.05-11.11 |
| Post-test | 46.84 | 0.000 | 11.69 | 2.34 | 0.25 | 88 | 11.13-12.12 |

well management strategies. The self-evaluation tools and quizzes at the end are also very useful to help us keep check on our learning and performance” (Montessori teacher)

Theme 3: Perceived impact of training

The participants reported that the training had an impact on their knowledge, their teaching practice, and on the need to work jointly with parents and other mental health professional in order to work collectively to meet the needs of the child. All the participants reported that they would recommend the programme to others.

“The best part of the training was the focus on the need for collaborative practice, working jointly with parents, school as well as other professional with the aim of helping the child, this is the best example of a holistic approach towards child development. I would definitely recommend this training to all teachers” (Grade 5, Class teacher)

Theme 4: Suggested improvements

An important theme that emerged from this evaluation was possible ways of improving the training programme through the inclusion of school heads and policy makers.

“the training touched upon some of the most useful aspects of dealing with children, the strategies and techniques shared during the training will help to deal effectively with children, however many of the recommended management strategies can only work with the consent of school heads. Future trainings should emphasis the attendance of school management authorities and decision makers to ensure definite and consistent change within the school system” (Primary class coordinator)

A commonly expressed view was that the training could be adapted to suit the needs of different academic professional, i.e. pitching it to experience, and grade level of the pupils as well as the location of the school. Although the intervention had been designed to apply to all children, for the purpose of the training intervention, the materials focused specifically on children aged 2.5-8 years. Participants suggested that this should be widened to secondary school pupils, and even at younger children attending nursery or playschool. The need for parental training session has also been emphasized.

“The training focused on very essential aspects of understanding and managing children with difficulties, it is essential that future training focus on the needs of adolescents and younger children. Trainings can also be designed separately for teachers depending on their own professional backgrounds and experiences. School in under-privileged areas have greater needs and challenges which can be addressed through a separate programme, the need to involve parents is also essential” (Grade 5, Class teacher)

DISCUSSION

The training sessions were associated with an improvement in teacher’s knowledge and awareness of various sign and symptoms of common child mental health problems. The qualitative findings complemented the results of statistical analysis. Teachers on the whole gave a positive feedback to the training and requested that future sessions incorporate more time and practice activities related to classroom strategies and behavioural management techniques. Teachers reported that the implementation of behaviour plans and management strategies were the most important topics for the training sessions. Future interventions could also include approaches to help manage the stress and frustration resulting from children with behavioral difficulties in the classroom¹⁵. Such work could enhance healthy education relationships. Potential benefits might be that referrals are appropriate and timely, the potential for misdiagnosis is reduced, and the quality of care for diagnosed children is improved.

Despite the usefulness of this training programme, it has a number of limitations. Collectively, the separate components of the study procedure (involving the baseline recognition exercise, the educational session and the post-training measure) constitute a complex intervention. As there was no control group, changes in knowledge cannot be attributed to the intervention and might reflect each of these components.

In terms of measures, the study used questionnaires rather than an interview to evaluate the effectiveness of the training outcome for the teachers. The questionnaire was based on a rating scale technique. Use of interviews to aid the questionnaires outcomes can provide healthier description of teacher’s knowledge and attitudes in the future. The questionnaire was designed specifically for this study and was not standardised. Whilst the questions and format were based on those used in previous studies⁹, using a questionnaire with established reliability and validity should be considered in further studies.

The final and most essential limitation of the study is that it leaves questions of whether improvements in knowledge will be maintained over time and also whether such endeavours improve long-term outcomes for the child. Future studies should have a follow-up plan to monitor and evaluate the progress of the training through the course of the academic session.

RECOMMENDATIONS AND IMPLICATIONS

Despite numerous limitations, this study concludes that training teachers increases their knowledge about common child mental health problems, further follow-up studies are needed to determine teacher’s ability to recognize or manage children with difficulties in classroom settings. Future studies should be based on arandomized controlled trial of an educational intervention to improve the identification and school based management of children with emotional and behavioral difficulties. With a

longer period of follow-up and anticipated referral to specialist services, symptomatic improvement and the cost-effectiveness of such an intervention can also be investigated⁶. As each teacher will get to know several hundred pupils over the years, educational approaches aimed at teachers may be more cost-effective than those targeting other professional such as GPs^{16, 17}.

A sound research methodology would produce outcome which are of international relevance and in keeping with recommendations that school-based mental health promotion and training programmes could facilitate the early and accurate identification and school based management of children with mental health problems¹⁸⁻¹⁹. Studies have suggested that school based mental health interventions are also highly recommended in low-income developing countries like Pakistan, where mental health issues are highly stigmatized. Positive mental health training interventions focusing on early identification can reduce the social barriers and results in long term effective outcomes^{20, 21}.

Earlier studies evaluating the effect of a school mental health programme in Pakistan, reported that knowledge, attitudes and superstitions significantly improved in a group of school children, their friends and neighbors after the implementation of the programme^{22,23}. The effectiveness of this intervention indicates that it is possible to conduct school-based interventions using available limited resources¹. Since the level of child mental health problems in Pakistan far exceeds the available resources, it is essential that teachers receive ongoing support to ensure that schools and educational authorities meet children's mental health needs. Replication of the current study (with an improved methodology), and extending it to include questions concerning the process by which teachers make decisions about whether or not a child has a problem, would provide further insight into this under-researched area.

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